

Free Medical Care in Cities

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Approximately 7 percent of urban residents reported receipt of free medical services in 1950. Almost 4 of each 10 persons reporting receipt of some free services indicated they received physician services free; 1 of 5 reported hospital services; and another 1 of 5 reported laboratory tests, immunizations, or X-rays. More than 4 of each 10 persons reporting free care indicated they received free care in public hospitals or through public assistance or private voluntary agencies.

A larger proportion of persons spending \$500 or more out-of-pocket for medical services reported free care than of those spending smaller amounts for medical services. Almost 9 percent of persons 19-44 years of age reported free care as compared with 4 percent of the population under 6 years of age. About 1 of 8 urban household members hospitalized during 1950 reported some free hospital services.

ONE important financial aspect of medical services is the volume of free care provided for families by a multiplicity of public and private agencies. There is a paucity of data on the volume and relative importance of public and private aid in meeting medical care needs. In 1950, public expenditures for health and medical services aggregated about \$2.4 billion; and voluntary health and welfare agencies spent \$370 million (1).

Household surveys can provide only a partial picture of free care, for the types of medical services that are financed by private and public aid often include long-term institutional care, such as that given in mental hospitals, which removes the recipient from the household. Yet it is of interest to determine even in an incom-

plete way the numbers of persons receiving free care, the nature of this care, and the types of agencies providing it.

In view of the interest in this aspect of financing medical services, we processed data on free medical care reported in a subsample of family interviews. The information was gathered by the Bureau of Labor Statistics from 12,500 urban families in its survey of consumer expenditures in 1950. In all, 2,414 families and 7,639 persons were included in the subsample. The methods of sampling and weighting the subsample to estimate an urban aggregate have been presented in other articles (2, 3). The subsample included 50 percent of the families reporting no out-of-pocket medical care expenses, 10 percent of those reporting some medical expenses but in amounts less than \$200, 20 percent of those reporting \$200 to \$400, 50 percent of those reporting \$400 to \$1,000, and all families reporting medical expenditures of \$1,000 or more (see table 1).

Totals for each of the medical care expense classes were weighted to adjust for the subsample size within each of the nine geographic regions used by the Bureau of Labor Statistics for its sample weights. Each of the nine regions in turn was then weighted in accordance with the relative population of these regions as estimated by the Bureau of Labor Statistics.

Definition of Free Care

The Bureau of Labor Statistics interview included the following questions as part of its section on medical and personal care: Did any family member receive medical care free in 1950? If yes, about how much was it worth?

In the interview, information was asked

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about each member of the family. The interviewers were instructed, with regard to these questions, that free medical care "is available in many cities in public and private clinics and health centers. Free chest X-rays are given by the Public Health Service. In addition, many employers have a doctor on their staff who provides medical care to employees at no charge. It may be difficult for a respondent to estimate the value of such service but ask him to give you his best guess, and to describe in detail what he received. Write your description of the services received in a footnote. Do not include medical care received because a family member is covered by a prepayment plan" (4).

Information on types of free care and their sources is taken from the interviewers' notes as recorded on the interviews. The classifications set forth in tables 2 and 3 are means of grouping the entries and are not part of the original questions.

As the instructions to the enumerators suggest, benefits paid by health insurance plans, including insurance financed in whole or in part by employer contributions, are excluded from free care. However, other types of insurance benefits and medical services recorded as free care by the interviewers were included: (a) automobile and other casualty insurance received as a result of an accident, (b) workmen's compensation medical services and inplant medical services, and (c) medical services in union health facilities and in special railroad hospitals. Other types of free care included care provided in public hospitals or financed under public programs such as public assistance programs, care financed by private welfare, health, and religious agencies and hospitals, and care provided without charge by members of a health profession as a matter of professional courtesy or as charity. The entries on free care appear to exclude medical services received at less than full rates, for example, reduced hospital charges.

There seemed to be some instances in which respondents interpreted free care as care paid for by a relative or friend. We excluded these entries from free care and from the tabulations presented here. Because the value of services was only roughly guessed no attempt was made to tabulate responses on that score. However,

the Bureau of Labor Statistics has tabulated these value items as part of the value of free items received for all goods and services. The amount of free medical care, according to an unpublished report of BLS, averaged \$19 for all urban families, including families who reported no free care, and \$123 for the 15.4 percent of families reporting some free medical care.

Limitations of Data

The Bureau of Labor Statistics study was designed to provide benchmark data on cost of living of urban families. Items of information on the interview that were not related specifically to the consumer price index were not defined as carefully nor edited as thoroughly as other items.

The supplementary nature of the question on free care suggests that interviewers did not seek or obtain detailed and uniform answers. Different respondents may have interpreted the question differently. There are patent differences in the completeness of information obtained by interviewers.

Our findings necessarily reflect the definition of free care used by the Bureau of Labor Statistics, the errors in reporting information, in sampling, and in estimating the aggregates, and the under-reporting of types of free services such as chest X-rays and school health services. In interpreting these findings, furthermore, the small sample size (table 1) must be borne in mind.

Type and Source of Free Care

Urban families reported receipt of a wide range of services free of charge (table 2). These included physician services, hospital care, nursing care, dental services, laboratory tests, immunizations, X-rays, and drugs.

Free hospital services were obtained by 2 in each 10 of those reporting free services, a proportion representing about 1.5 percent of the urban population and almost 12 percent of those reporting hospitalization during the year. This proportion includes persons who reported care without charge (a) in State and local public hospitals and in Federal hospitals, including

Veterans Administration hospitals and Public Health Service hospitals, (b) through research programs, (c) under workmen's compensation, (d) under arrangements paid by casualty insurance, such as automobile liability insurance, and (e) under public assistance programs.

The proportion of free hospital care indicated by the 1950 consumer expenditures survey is similar to findings of the Health Information Foundation. In its 1952-53 household survey, the foundation found that 1 or 2 percent of all families received only free hospital services (5).

The most frequent type of service received without charge was physician care. Of those reporting free service, 4 out of each 10 reported physician services outside of hospitals. Included among these services are those provided by physicians for members of their families, other relatives, employees, professional colleagues, and patients unable to pay, services in outpatient departments of hospitals, industrial inplant medical services, and services provided for workmen's compensation cases. The persons reporting such services represented about 3 percent of the urban population, or about 3 million people.

Services received from physicians on hospital staffs were in many cases included within free "hospital care." There were many instances of hospitalization in which the information reported in the interview did not show out-of-pocket expenses for physician services, insurance benefits received, or free physician care. Many of those reporting care in veterans hospitals and military hospitals, for example, did not report free physician services.

Table 1. Number of persons reporting free care in Public Health Service subsample of Bureau of Labor Statistics interview schedules, 1950

Family out-of-pocket medical care expenditures	Sampling ratio (percent)	Number of persons	Number of persons reporting free care
Total.....	-----	7, 639	572
None.....	50	633	110
\$1-\$199.....	10	2, 236	169
\$200-\$399.....	20	1, 930	104
\$400-\$999.....	50	2, 287	165
\$1,000 and over.....	100	553	24

Table 2. Percentage distribution of urban residents reporting free medical care, by type of care, 1950

Type of free care	Residents reporting free care	
	Major type	Multiple types
Total.....	100. 0	-----
Hospital.....	19. 4	19. 4
Physician.....	38. 9	59. 2
Nurse.....	1. 4	1. 4
Dental.....	6. 4	9. 0
Laboratory tests, immunizations, and X-rays.....	18. 2	19. 0
Clinic.....	1. 2	1. 3
Drugs.....	1. 3	5. 5
Other.....	2. 6	2. 7
No report.....	10. 6	10. 6

In other instances, the families reported free physician services along with hospital care. The information was tabulated attributing physician services uniformly to those urban residents reporting free hospitalization, if the information did not otherwise indicate the purchase of physician services. If the multiple entries are counted in this way, almost 6 of each 10 persons reporting free services received free physician care, including, in this instance, free care provided by physicians on staffs of hospitals.

Moreover, for those persons reporting multiple types of free services, a single, major type was selected according to the relative importance of the service. Entries reporting free "hospital care," for example, were counted only as a free hospital service even though other types of care were also noted. Similarly, if the respondent reported free physician care outside of a hospital and also free X-ray, drugs, or other services the care was classified as free physician care. The order of the classification of entries corresponds to the arrangement in table 2.

Table 3 shows a distribution of the sources of free care. Each type of source, when multiple aid was reported, and the major source, as listed, are included.

A large proportion of the respondents, some 28 percent of those reporting free care, did not report the source of free care received. Of

those reporting free care, approximately 13 percent received services as professional courtesy or as charity; another 13 percent received care through public assistance agencies; and for 14 percent services were paid for by employers. Included in the last are inplant medical services, services in connection with workmen's compensation cases, and employer arrangements other than health insurance. As indicated earlier, reporting instructions explicitly excluded services received under health insurance plans toward which the employer contributed all or part of the premium.

Free hospital care was financed by public assistance or by Federal agencies for more than half of those reporting free hospitalization.

Age and Income Differentials

The proportion of persons reporting free care varied by age group (table 4). Free care was reported for only 4 percent of the children under 6 years living in urban households. In contrast, 8.8 percent of those 19-44 years of age reported receiving free care. The percentage of persons 65 to 74 years of age reporting free care was less than the average for all age groups; however, the proportion of those 75 years of age and over was about the same as the average for all age groups.

In view of the volume of care provided for children through schools, clinics, and public

Table 3. Percentage distribution of urban residents reporting free medical care and free hospital care, by source of care, 1950

Source of free care	Residents reporting free care		Residents reporting free hospital care
	Major source	Multiple sources	
Total.....	100.0	-----	100.0
Public (State and local) and nonprofit hospitals.....	6.6	6.6	19.4
Federal agencies.....	13.6	13.6	26.0
Public assistance.....	12.6	12.6	30.6
Other organizations.....	11.1	11.6	1.5
Employers.....	13.7	13.9	7.7
Health professions.....	12.6	12.9	5.7
Casualty insurance.....	1.3	1.3	0
No report.....	28.5	28.5	9.1

Table 4. Percentage of urban residents in each age group reporting free medical care, 1950

Age group (years)	Percent
All age groups.....	7.2
Under 6.....	4.0
6-18.....	7.4
19-44.....	8.8
45-64.....	6.4
65-74.....	6.1
75 and over.....	7.5

health departments, it would appear that free care for children, especially those under 6 years of age, is under-reported.

Tests of income and means applied in the administration of many public programs as well as programs of voluntary welfare and health agencies suggest that persons receiving services provided without charge are primarily in low-income families. Our findings indicate no great concentration of free services in low-income families. Those with relatively high family incomes also received free medical care. Approximately 18 percent of the persons reporting free care were in families with incomes of less than \$2,000 per year; about 12 percent of all urban residents in 1950 were in families with incomes below \$2,000. At the other end of the income scale, about 5 percent of those receiving free care were in families with incomes of \$7,500 or more, whereas 7.6 percent of all urban residents in 1950 were in families with that income (table 5).

A larger percentage of urban residents in families with incomes under \$2,000 reported free medical care than those with higher incomes. The percentage of persons reporting free medical care decreases until the income level reaches \$4,000 to \$4,999 and then tends to increase except for the highest income level. This pattern of receipt of free medical services by income classes may reflect differences in types of free medical services available in the community. While free care contingent on need is available through public programs such as public assistance programs and State and local public hospitals and through veterans' benefits for non-service-connected disabilities, there are other types of medical care programs under which eligibility is connected

with employment. For example, medical care under workmen's compensation, under union and employer plans, and under Government programs (such as the program for merchant seamen and for members of the armed services) is available only to those attached to a work force. Income levels of those receiving such care are related to the earnings in these employments.

The nurse receiving care in the hospital and the relative of a physician or dentist receiving care through his office illustrate another category of care which is not related to low family income.

Medical Expense Differentials

Are free services received primarily by individuals who have no expenses or small out-of-pocket expenses for medical services? Of the urban population as a whole, 17.4 percent reported no out-of-pocket expenses for medical care during 1950, whereas 1.3 percent reported no out-of-pocket spending along with free care. About 48 percent of the urban population reported medical expenditures of \$1 to \$49; 3.6 percent reported medical expenses of \$1 to \$49 with free care (table 6). Or stated somewhat differently, there is a curvilinear relationship

Table 5. Distribution of urban residents and of urban residents reporting free care, by family income after taxes, 1950

Family income group	Percent of all residents ¹	Percent of residents reporting free care	Percent in each income group reporting free care
All income groups-----	100.0	100.0	7.2
Under \$1,000-----	3.1	5.4	12.9
\$1,000-\$1,999-----	8.6	12.5	11.3
\$2,000-\$2,999-----	16.8	16.2	7.9
\$3,000-\$3,999-----	25.5	23.2	6.5
\$4,000-\$4,999-----	19.1	15.8	5.6
\$5,000-\$5,999-----	11.4	12.4	7.7
\$6,000-\$7,499-----	7.9	9.6	6.9
\$7,500 and over-----	7.6	4.9	4.4

¹ Derived from Study of Consumer Expenditures, Income and Savings; Vol. 18, Summary of Family Incomes, Expenditures, and Savings, All Urban Areas Combined. Philadelphia, Wharton School of Finance and Commerce, University of Pennsylvania, 1957, p. 2.

Table 6. Out-of-pocket medical spending by urban residents and by urban residents reporting free medical care, 1950

Out-of-pocket medical care expenditures	Percent of all residents	Percent of all residents reporting free care	Percent in each expense group reporting free care
Total-----	100.0	7.2	7.2
None-----	17.4	1.3	7.6
\$1-\$49-----	47.9	3.6	7.4
\$50-\$99-----	17.5	1.2	6.9
\$100-\$199-----	10.2	.7	6.5
\$200-\$299-----	3.7	.2	4.8
\$300-\$499-----	2.1	.1	5.6
\$500 and over-----	1.2	.1	9.0

between receipt of free medical care and size of out-of-pocket medical expenses.

Of urban residents reporting no out-of-pocket expenses, 7.6 percent indicated they received free care; 7.4 percent of those reporting expenses from \$1 to \$49 reported free care. The percentage of persons reporting free care is lower than average for each of the medical expense classes from \$50 to \$500 of out-of-pocket expenses. Of those spending \$500 and over for medical care, however, 9 percent reported some free care. This finding suggests the need to explore such questions as how private spending for medical care is supplemented by free services, through what agencies and arrangements individuals with expensive illnesses gain access to free services, and whether there are barriers to such access which necessitate large out-of-pocket family spending before free care can be received.

In general, our purpose here has been to stimulate interest in the distribution of free medical care among groups differing in age, income, and medical expense, and to encourage further study.

REFERENCES

- (1) U. S. President's Commission on the Health Needs of the Nation: Building America's health; a report to the President. Vol. 4. Financing a health program for America. Washington, D. C., U. S. Government Printing Office, 1953, p. 151.

- (2) Mushkin, S.: Age differential in medical spending. Pub. Health Rep. 72: 115-120, February 1957.
- (3) Mushkin, S.: Characteristics of large medical expenses. Pub. Health Rep. 72: 697-702, August 1957.
- (4) U. S. Bureau of Labor Statistics: Survey of consumer expenditures in 1950; collection manual. Washington, D. C., January 1951, p. 114.
- (5) Anderson, O. W., and Feldman, J. J.: Family medical costs and voluntary health insurance; a nationwide survey. New York, McGraw-Hill, 1956, p. 139.

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